**BACKGROUND**

TICAM-1, also known as Toll-interleukin-1 receptor domain (TIR)-containing adaptor molecule, maps at chromosome 19p13.3. It can physically bind the TIR domain of Toll-like receptor 3 (TLR3) and activate the IFN-β promoter. TLR proteins are signaling molecules that can recognize pathogen associated molecular patterns and may function as a link between the innate and adaptive immune responses. TICAM-1 mediates dsRNA-TLR3-dependent production of IFN-β. This TICAM-1-dependent pathway is important for other TLR-IFN-β pathways, which form part of the MyD88-independent cellular immune response. TICAM-2, a cytoplasmic protein, physically bridges TLR4 and TICAM-1 and functions to transmit LPS-TLR4 signaling to TICAM-1, which in turn activates IRF-3. In its structural features, TICAM-2 resembles Mal/TIRAP, an adapter that links TLR2/4 and MyD88.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TICAM2 (human) mapping to 5q22.3; Ticam2 (mouse) mapping to 18 C.

**SOURCE**

TICAM-2 (E-2) is a mouse monoclonal antibody raised against amino acids 142-226 mapping near the C-terminus of TICAM-2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TICAM-2 (E-2) is available conjugated to agarose (sc-376076AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376076 HRP), 200 µg/ml, for WB, IHC (κ) and ELISA; to either phycoerythrin (sc-376076 PE), fluorescein (sc-376076 FITC), Alexa Fluor® 488 (sc-376076 AF488), Alexa Fluor® 546 (sc-376076 AF546), Alexa Fluor® 594 (sc-376076 AF594) or Alexa Fluor® 647 (sc-376076 AF647), 200 µg/ml, for WB (RGB), IF, IHC (κ) and FCM; and to either Alexa Fluor® 680 (sc-376076 AF680) or Alexa Fluor® 790 (sc-376076 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

TICAM-2 (E-2) is recommended for detection of TICAM-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry [including paraffin-embedded sections] (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of TICAM-2: 22 kDa.

Positive Controls: KN92 whole cell lysate: sc-2214, rat lung extract: sc-2396 or rat kidney extract: sc-2394.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BPHRP: sc-516102 or m-IgG BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
3) Immunofluorescence: use m-IgG BPHRP: sc-516140 or m-IgG BPHRP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.
4) Immunohistochemistry: use m-IgG BPHRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

TICAM-2 (E-2): sc-376076. Western blot analysis of TICAM-2 expression in KN92 whole cell lysate (A) and rat lung (B) and rat kidney (C) tissue extracts.

TICAM-2 (E-2): sc-376076. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic staining of neuronal and glial cells.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.